

THE FLIGHT OF EAGLES

BY

C. H. DONALD

(With three plates)

When I received an invitation from our editors to write a note on Eagles for the *Journal* for this, its fiftieth birthday, I accepted with the greatest pleasure for well did I know what joy was in store for me. Would I not be going over some of the happiest days in my life in which eagles, falconry and the Bombay Natural History Society were all inextricably woven into a glorious background of the vast virgin forests of Bhadarwa and Kashmir, where I seemed to be the little tin god in command of a world of forest coolies, with plenty of leisure on my hands?

I had already embarked on falconry in the plains of India and had been most fortunate in securing the services of two old *bāzdars* (falconers) who had served my father in Hissar, during the troublous times of 1857. It was impossible to live long in the company of such enthusiasts without being bitten to the bone with their craze. They were brothers and rejoiced in the names of Jhanda and Balunda, respectively. White-bearded old Jhunda, who said he was not yet quite seventy, usually stayed behind and looked after my team of falcons, and incidentally did most of the training, while *little* Balunda—a mere boy of some 50 odd summers—accompanied me everywhere and was my constant companion and *ustad* or tutor. With eyes like one of the falcons on his wrist, that man missed nothing which flew or ran, and from him I learnt lessons which have stood me in very good stead for over half a century, of how to recognise the different birds of prey by their flight, almost as far as you could see them. With a few tips from Balunda I soon discovered the process as not only interesting, but amazingly simple. It just came, and gradually you found yourself recognising at a glance, confidently, bird after bird as it flew past or soared high up in the sky.

One day the supreme test came; we were up at about 11,000 ft. and above tree level, when Balunda came to a stop and said in awed tones, 'Sahib, what is that?'

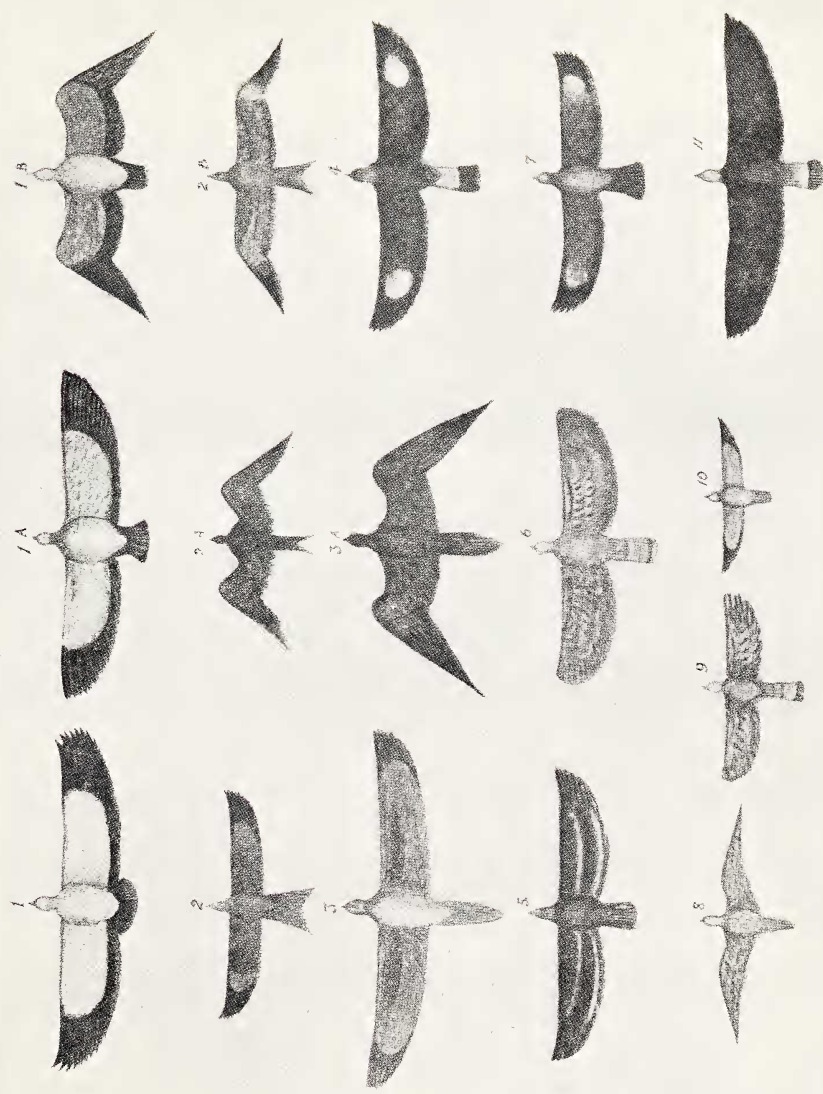
I followed his gaze and there, a thousand feet or so above us, soared a huge bird on motionless pinions. '*Burra Jūmbiz*!' I exclaimed, unable to think of anything else for a very dark and large bird. 'No, no, Sahib, that is no *Jūmbiz* but a mighty hunter which I have never seen before.'

I marvelled. The old man admitted he had never seen the bird before yet recognised it as a mighty hunter, a thousand feet above him. I looked and looked again. I had seen that bird before many times, in different localities but now for the first time saw what Balunda meant. The flight was entirely different to that of the *Jūmbiz* or

Imperial Eagle. Forceful and resolute, yet light and buoyant. 'Balunda, call him down and I'll shoot him and find out what it is.' 'That is easy, Sahib. You get in under that bush and I'll have him down in a couple of minutes.' Out came Balunda's ubiquitous bag and from it he extracted a dead pigeon, a lure composed of crows' wings attached to some 10 ft. of string. Then taking the falcon on his wrist he removed the hood and placed the bird on a conspicuous boulder and rushed back to hide under a bush to my right. Next he threw out the lure, giving the customary call for the falcon to come and bind to it, which she did immediately, and Balunda proceeded to draw her in, still holding the lure, which made her flutter not a little. None of this drama was lost to those all-seeing eyes up in the sky. 'He is coming, Sahib', whispered Balunda, a fact I had noted for myself a few seconds previously. The falcon saw her danger and picking up the lure flew under Balunda's bush just as I fired at the black ball descending at umpteen miles per hour. No. 1 shot did the trick, and the great bird fell with a dull thud, dead, where the falcon had been a couple of seconds before.

Balunda rushed to it, turned it over, and pointed to the enormous foot and claws. 'Did I not say he was a great hunter, Sahib? That bird could kill a sheep or even a man.' 'This must be the bird the shepherds call a *Muriari* of which I have heard a lot in the last few months,' said Balunda, and I too had heard a good deal of its depredations among the shepherds' flocks. But as time went on and I persisted in my search for correct information, the assertions of its killing sheep and lambs became more and more vague; and in some 50 years of wandering all over the Himalayas I do not think I met with more than half a dozen men who had *actually seen* this eagle attack a sheep, though I had myself seen one kill a tahr.

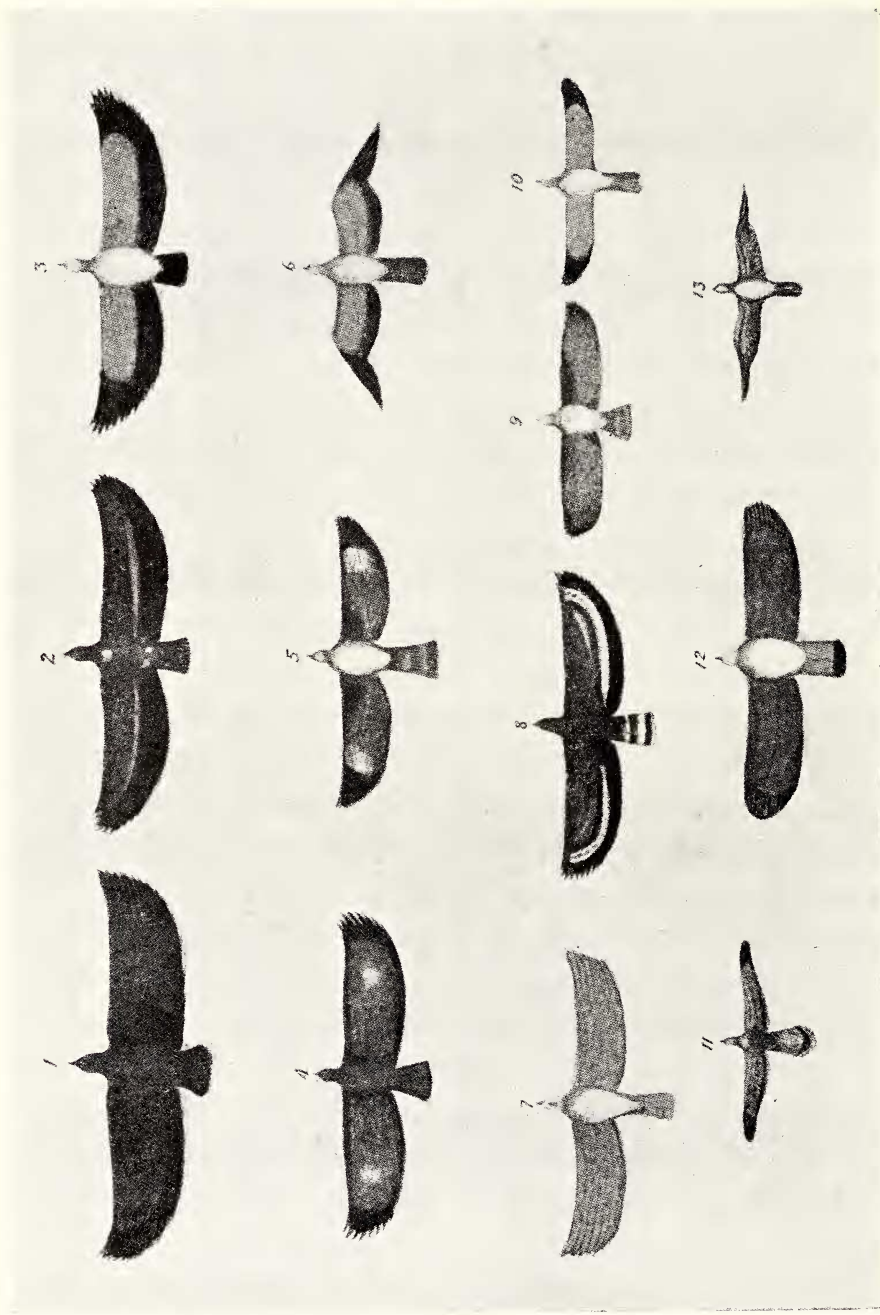
We wrapped him up in Balunda's sheet and made for camp where the eagle was skinned and filled with moss and lichen, and on the following morning the skin was on its way to Bombay. A long week of suspense and, at long last, a reply from the Hony. Secretary, acknowledging receipt of the 'lovely skin' and informing me that the bird was an Imperial Eagle. How could I break this to Balunda, the more especially that after a few talks and explanations from him as to the flight of the bird, to say nothing of those claws, I was now very much of his way of thinking. By return post I replied and thanked the Hony. Secretary for his letter and asked for another examination, as I was sure the bird was *not* an Imperial Eagle whatever else it might be. Back came a reply that a committee of the leading ornithologists, then in India, had gone carefully over the bird and come to the unanimous conclusion that the bird *was* an Imperial Eagle. This was getting serious, so what should we do next? I again replied very politely and asked if it would be possible to send the bird to the Natural History Museum, London. It went, and three months later came the reply: 'The bird is a young Golden Eagle in transition stage of plumage.' Good old Balunda! He had the unfailing key to the identification of accipitrine birds—Flight. A falconer, born and bred from many generations of men who had watched every phase of flight, and had not confined themselves to their hawks and falcons.



Diagrams by

C. H. Donald

Some Birds of Prey
Diagrammatic impressions of overhead flight
(For explanation see end of article)



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Now it must not be supposed that I have written the above introduction merely to praise Balunda, but when I quote from a well-known book, which many members must have read, a paragraph which completely misled me, and must have similarly put off many a young tyro like myself, thirsting for knowledge, it will be conceded there is some method in my madness. The paragraph reads:—‘As far as I am aware this bird is of such excessive rarity in the Himalayas, south of the snows, as scarcely to deserve a place in our lists. Every so-called Golden Eagle which has as yet been sent to me, has proved to be *A. imperialis* in the dark 3rd stage of plumage.’ The author had, at Kotgarh (Simla Hills), a regular establishment for shooting and preserving birds, from which he received over a thousand specimens and who had special injunctions to shoot all large eagles. From them he apparently received several Imperial Eagles but not one single Golden.

Later he modifies the above in his ‘Nests and Eggs’, Vol. III, pp. 130-131, by saying ‘the Golden Eagle occurs and breeds sparingly in the Himalayas from Sikhim to Afghanistan. In the eastern and central portion of this tract it is confined to the immediate neighbourhood of the snowy ranges, but in the extreme N.W. it comes nearer down towards the plains.’

Another well-known ornithologist once wrote to inform me that in 20 years collecting his collectors had never found a Golden Eagle in Kashmir. Some months later I happened to be in Srinagar, and paid a visit to the museum, and the very first thing, on entering the door, I was confronted by was a magnificent specimen of a female Golden Eagle, in its first plumage, labelled ‘*Aquila heliaca*: The Imperial Eagle. This bird sometimes catches Chikor.’

Further comment seems superfluous, except to emphasise the fact that if an illiterate old man is able to identify a bird which he has never even seen in his life, at about 1,000 ft. above him, as a mighty hunter and *not* an Imperial Eagle, it is obvious there must be something in his system of identification which is entirely lacking in the make-up of most good ornithologists; and that something is the key in the study of the birds of prey, viz. their *very distinctive flight* which varies considerably from the one to the other of the various species.

All Indian falconers are extremely good at recognising birds on the wing, but Balunda had made of this hobby a fine art, and in the five years or so he was with me I never lost an opportunity of asking him what any particular species that might be passing at the time was, and, as a rule, his reply came pat without the least hesitation, but very occasionally he seemed to look very carefully before replying and in such cases it was generally *Astur badius* or *Accipiter nisus* that caused the slight momentary doubt in his mind, and that only when the light was against him, and no colouring or markings could be seen.

I would not like to say that this method is infallible, but it is certainly 95% correct, and where it goes wrong is probably due to the specimen in hand rather than the system, as aberrant specimens are by no means unknown among the Raptores, and a very obvious Tawny Eagle in the air might turn out to be a Steppe in the hand, or vice versa; extremely rare, I should say, but just possible.

The keys given in Blanford and Oates’s Fauna of British India—Birds, and Stuart Baker’s more recent revision of the same, cannot

well be improved on, and in my paper in Vol. xxvi, No. 2 (pp. 629 *et seq.*) of the *B.N.H.S. Journal*, I have used the above keys freely. With that paper are also two charts showing different birds in flight, which, I have been told by many members, have been of great service to them in identifying birds of prey. The reprints of these papers were, at the time, sold by the Society, and if still available, I would certainly recommend their careful study, to anyone keen on taking up these birds as a hobby¹. Not being an artist in any way, I can lay no claim to beauty of execution, but if they are clear enough to depict the differences in overhead flight between the various species, the papers and the charts will have served their purpose.

I am told the real 'headaches' are the Imperial Eagle (*Aquila heliaca*), the Steppe Eagle (*Aquila nipalensis*) and the Tawny Eagle (*Aquila rapax*). With the possible exception of an abnormal specimen turning up, I should have said off-hand, that these three are among the easiest to separate. Let us take each species separately. Each species has two very different phases of plumage, a very light brown to deep umber brown which in the Imperial is almost verging on black in the adult bird; and there are many shades in between.

1. **The Imperial Eagle** (*Aquila heliaca*). In the young or lineated stage, whether the overall colouring is light brown or very dark brown, there are always lines of darker brown spots running down the full length of the breast and front of the bird generally.

In the adult stage the whole plumage, i.e. the background is very dark brown almost black. The head is white or whitish changing to buff on the nape and a few odd pure white feathers are visible on the scapulars and back. A white bar on the tail completes the set-up of this species.

2. **The Steppe Eagle** (*Aquila nipalensis*). Whether the overall plumage be dark or light brown, it is always uniform on the breast and never lineated or spotted in any way, thus it can never be confused with the Imperial Eagle in its young (lineated) plumage or in fact at any stage. In this species there is a light bar, or often two, running the whole length of the wing made by the upper and lower faded wing covert tips. These bars are always visible and a distinctive feature of the bird.

3. **The Tawny Eagle** (*Aquila rapax*). General colouring not unlike the Steppe Eagle whether in the light or dark phase, but the Tawny lacks the white bars on the wing and is an *altogether smaller* bird, with a tarsus measurement of $2\frac{1}{2}$ " to 3" as against $3\frac{1}{2}$ " to 4" in the Steppe. Length of Steppe Eagle might easily exceed that of the Tawny by five or six inches, and the wing span of the latter is noticeably less.

It is, however, in the two last species that 'headaches' might be caused by aberrant specimens, as I am of the opinion, perhaps quite erroneously, that very occasionally they *may* interbreed. I have seen, on one occasion, a Steppe Eagle carrying sticks to the nest whence I had just previously caught a Tawny. I also on one occasion shot what I was sure was a Tawny, on a high pass in Kulu, on the migration

¹ The charts are reproduced herewith. Reprints of the papers are unfortunately no longer available.—Eds.